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Conservation et Protection
Région du Québec

Environment Canada
Conservation and Protection
Quebec Region

DIRECTION DES ÉVALUATIONS ENVIRONNEMENTALES ET DU NORD QUÉBÉCOIS

ENVIRONMENTAL ASSESSMENT AND NORTHERN QUÉBEC AFFAIRS BRANCH

Canada

DIRECTORY OF
ENVIRONMENTAL DATA BANKS
ON NORTHERN QUÉBEC

Environment Canada

Conservation and Protection, Québec Region

Environmental Assessment

and Northern Québec Affairs Branch

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FOREWORD

The **Directory of Environmental Data Banks on Northern Québec** is intended to provide individuals and organizations with a work tool for accessing environmental information available on computer.

Close co-operation among partners involved in Northern Québec was required in compiling this directory, which consolidates information from all sources on environmental issues of concern to the federal government and provides experts on the Canadian North with data of interest.

The **Environmental Assessment and Northern Québec Affairs Branch** would like to thank the following persons for their contributions to this document:

* Luc Bergeron

* John Haemmerli

* Daniel Robitaille

* Réal Bisson

To add items to the directory, or to obtain further information, please contact the Environmental Assessment and Northern Québec Affairs Branch.

SUMMARY

The **Directory of Environmental Data Banks on Northern Québec** is intended to provide individuals and organizations interested in Northern Québec with a work tool to access environmental information already on computer.

While not exhaustive, the directory brings together more than 80 computerized data banks containing a variety of pertinent information on the Northern Québec and circumboreal regions. This information comes from more than forty federal and Québec government bodies, universities, para-governmental organizations, the private sector and Native groups.

Many organizations interested in the natural, cultural and environmental aspects of Northern Québec have created data banks covering a multitude of environmental, administrative, social, geographic, scientific and technical subjects. The directory contains a brief description of each of these data banks, identifying the developer, the organization responsible and the data bank name and type, and providing a summary of its contents, the environmental issues concerned, update frequency, computer access system and the name and address of the resource person to access the data bank.

One section of the directory is devoted to a description of the various reference sources for information on what is currently known about projects similar to those planned for Northern Québec. The nine bibliographic data banks described contain references dealing mainly with the circumboreal regions of the Canadian North and Europe.

In addition, in order to promote the use of information networks and telereference systems, the directory presents examples of these systems and the names and addresses of the resource persons to contact to access them. Bibliographic reference data bases available on digital disks are also included. This information is summarized in tables.

Lastly, the directory includes four indices. Each index is designed to facilitate information retrieval based on need. Information may be obtained based on the name of the data bank, the organization responsible, the environmental issues concerned or by general or specific subject.

The first edition of the **Directory of Environmental Data Banks on Northern Québec** is an initiative of the **Environmental Assessment and Northern Québec Affairs Branch** of **Environment Canada**. An annual update will be carried out to add further data and/or new data banks so that the directory will remain useful for years to come.

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ANNEX

PRESENTATION

INTRODUCTION

The implementation of hydroelectric development projects in Northern Québec in the mid-1970s produced a wealth of information on the Northern environment and, as a result, fortered the emergence of a number of small specialized documentation centres. However, factors such as the lack of concerted action and the isolation resulting from the personal research objectives of those involved in Northern Québec and the deferment of phase II of the James Bay and Hudson Bay projects, did nothing to further the development of a central information retrieval system.

The need to set up a central retrieval system for scientific environmental information for cold regions remains an ongoing concern and a major challenge for both governmental and private organizations.

Thus, over the past few years, the centre for the **Arctic Science and Technology Information System** and the **Canadian Circumpolar Library** have been working to combine under a single bibliographical retrieval system all information on the Canadian North. Such a project requires considerable human and technical resources. Consequently, various organizations have taken separate initiatives to produce directories tailored to their own needs and interests.

At the federal **Department of Indian Affairs and Northern Development** in 1988, Robitaille helped to create a directory and prepare an analysis of the Northern collections in Québec. **Statistics Canada**, in cooperation with **Environment Canada**, has published an information system covering data banks on the state of the environment (State of the environment reporting branch, report no. 16). **The St. Lavrence Centre** aims to consolidate computer data related to the St. Lavrence River under a geomatic system. **The ministère des Communications du Québec** recently published a survey of data banks within the Québec government.

Nevertheless, the information needs of government departments and public organizations vary in nature and in scope according to the levels of responsibility. Data banks are an important resource for attaining work objectives. The absence of a directory makes it almost impossible to verify if the information an organization is planning to produce already exists or if the data it intends to collect have already been collected. This situation often leads to sometimes costly duplications and data bank directory overlaps.

This report provides users with a specialized directory and a short summary of the contents of environment-related bibliographical, factual and numerical data banks, making it possible to document studies regarding federal environmental concerns about Northern Québec.

METHODOLOGY

All the directories make reference to a number of organizations that handle information on Northern Québec. Of these, **Hydro-Québec** continues to be the main distributor of information concerning ecological surveys as well as assessments and studies of the environmental impact of hydro-electric projects in Northern Québec. On the other hand, impact studies of smaller development projects are little publicized and remain, to all intents and purposes, unknown.

Given the small number of distributors, a duplication of reference works is evident within telereference networks. It was agreed that only the more active organizations in the area of information production and dissemination as well as universities would be included in the directory. The latter offer a considerable amount of expertise and basic knowledge in specific areas of interest. The geographic framework has been expanded beyond Québec to include data banks specializing in Polar regions.

The directory includes directly and indirectly some **82 data banks** that are likely to contain pertinent environmental information related to federal concerns about Northern Québec. The data banks deal with subjects such as protection of the Native way of life, fish habitat, marine environment, conservation of wildlife and wildlife habitat, management of Northern vaters, conservation of the lac à l'Eau Claire Basin, mercury contamination of the environment and the food chain, world heritage and cumulative impact.

Examination of the information received from the various organizations showed that this data bank directory is far from complete. Today, the prevalence of microcomputers and the installation of data bank management systems are such that many people use various technologies to establish their own data banks. Information is therefore isolated. It would be essential to plan a vertical directory of the information resources of both the Federal and Provincial governments as well as environmental organizations in order to identify a more extensive pool of environmental data banks.

TYPES OF DATA BANKS

Experts in the area of information dissemination through telematic or telereference networks have divided data banks into five categories:

- numerical (statistics of all kinds);
- factual (directories, company records, dictionaries);
- full text (laws and regulations);
- bibliographical (references, abstracts);
- graphic (videotext, teletext).

USER FEES

Each organization providing a telereference system has its own policy regarding user fees. Fees vary according to the charging method used. For example, some organizations charge a subscription fee, while others charge according to the time of day certain records are consulted and the total connection time.

Some companies might charge a rental fee in addition to the basic hourly rate, while others require a fee for printouts. The information provided here is very general, particularly since rate policies may change without notice. It is up to users to check with each organization.

ORGANIZATION OF DATA BANK DIRECTORY

The directory presents a collection of data banks of environmental interest. These data banks have been selected according to environmental issues and federal legal concerns about Northern Québec.

The information is organized as follows. The first section lists the data banks according to various government, private and paragovernmental organizations. The second section comprises data banks of international character which can be accessed via telematic networks. The third section describes the various data bank access systems and gives their addresses. The last section summarizes, in table form, the information and characteristics of the data banks and telereference systems.

Each data bank description contains the following items of information:

- name of the organization;
- name of the data bank, where applicable;
- summary of the content of the data bank;
- frequency of updates;
- telereference system;
- environmental issues of interest to the federal government;
- producer of the data bank;
- resource person;
- mailing address, telephone and electronic mail address.

The **Environmental Assessment and Northern Québec Affairs Branch** plans to periodically update its directory. Any correction or any new information that would be helpful to users will be gratefully accepted. A page has been included at the end of the directory for this purpose.

INFORMATION LAYOUT

Identification:	* name of the department, native group, University, etc.
Name of the Organization:	* Branch, Service, Research Centre, etc.
Name of data bank:	* name.
Type of data bank:	* numerical; * factual; * bibliographical; * others.
Content summary:	* brief description; * subject and use; * parameters measured; * region of interest: one or more regions in Québec; * collection method.
Environmental issues:	* Native way of life, fish habitat, marine environment, conservation of wildlife and wildlife habitat, management of Northern waters, conservation of the lac à l'Eau Claire Basin, mercury contamination of the environment and the food chain, world heritage and cumulative impact. * specify your concerns as well
Update frequency:	* annual; * quaterly, etc.
Computer system:	* access; * telereference; * restrictions and conditions; * assistance available to users.
Producer:	* identification; * complete address.
Resource person:	* name; * complete address.
Telephone:	*
Fax:	*
Electronic mail address:	*
Additionals informations:	*

USE OF INDICES

The directory includes four indices, each intended to facilitate information retrieval according to need. It is possible to locate information in the following ways:

1- by the name of the data bank;

2- by the name of the organization responsible;

3- by the environmental issues concerned;

4- by general and specific subjects.

Each index includes a reference to the corresponding data bank page.

1- Data bank index

This index lists all the data banks which are described in detail. Retrieval may be carried out based on the name of the data bank and, if applicable, its recognized abbreviation. The index also contains the names of data banks cited, but not described in detail in the directory. Even though the information foun in these additional data banks does not necessarily concern the North, tehy are included because the information they contain is enriching and encourages optimal use of existing information. In addition, the various access systems and digital disks are indexed according to their name or abbreviation.

2- Organization index

This index is especially useful if you do not knov the official name of a data bank, or if you want to know if an organization has information on Northern Québec.

Querying is based on the official name of the organization in question or, if applicable, its recognized abbreviation. Organizations are often subdivided into branches or services where data is mainly located. In these cases, the index search may be carried out using these management units. For example, the **Northern Québec Specialists** data bank is managed by the Environmental Assessments and Northern Québec Affairs **Branch** of **Environment Canada**. In addition organizations cited in the Directory are listed in the index. These organizations are not necessarily responsible for data banks, but may be custodians, have a link to the information presented or be the contact for data consultation or acquisition.

3- Index of environmental issues

Consultation of this alphabetical table allows Directory data banks concerning particular environmental issues to be located quickly.

However, the list of issues reflects federal government concerns with regard to Northern Québec. If these issues do not correspond to your information needs, it would be more useful to retrieve through the subject index.

4- Subject index

The subjects cover the contents of each data bank (from the general to the particular) in as complete and varied a way as possible. Subjects refer to the environment (for example, habitat conservation), administration (for example, land claims), social issues (for example, health), or populations (for example, Cree).

Subjects may sometimes be related to a particular location (for example, lac à l'Eau Claire, region (for example, James Bay) or project (for example, Grande-Baleine). It is also possible to search all data banks in the Directory for information on **caribou** or **mercury**, or to locate all data banks concerned with general (for example, geomorphology) or specific (for example, Holocene paleoecology) scientific fields.

In addition, to ensure that information can be located easily, the subject index includes synonyms for words and variations in spelling for subjects. For example, it is possible to search for information on **protected environments**, but also on **parks** or **ecological reserves**. It should be noted that use of one or another of these terms will not necessarily direct users to the same data bank. The same is true for **Native** or **Amerindian**. In order to follow the terminology of each data bank, we did not homogenize all the terms used by the various organizations. A careful preliminary examination of the subject index could be very useful in retrieving information and offer the reader a wider choice of data banks.

1. NORTHERN QUÉBEC REGIONS

1. NORTHERN QUÉBEC REGIONS

1.1 GOVERNMENT OF CANADA

1.11 Department of Indian Affairs and Northern Development

1.111 Treaties and Historical Research Centre

Name of data bank: Directory of Bibliographical Data Centres

Type of data bank: Bibliographical

Content summary:

The Research directorate of the Department of Indian and Northern affairs has published a research guide entitled Native Studies in Canada. This guide contains information on Native programs and courses, Native organizations, reference centres and a selected bibliography. The purpose of this directory is to make research work easier for all those who are in some way involved in Native studies by providing basic information and references. It contains a selected bibliography that will serve as a guide for researchers according to their fields of interest. The nature and scope of the documentation related to Native studies are very varied in the numerous reference centres that exist across Canada. A number of these centres and their characteristics are cited here, in particular, educational and cultural Native centres, the federal Department of Indian and Northern affairs, archives, libraries and other special reference centres.

Environmental issues: Native way of life, mercury contamination of the environment and the food chain and world heritage.

Update frequency: Continual.

Computer system: Unspecified.

Producer: Department of Indian Affairs and Northern Development
Treaties and Historical Research Centre
Ottawa, Ontario
K1A OH4

Resource person: Allen S. Robert

Telephone: (819) 997-8157
Fax:
Electronic mail address:

Additionals informations:

1.11 Department of Indian Affairs and Northern Development

1.112 Circumpolar and Scientific Affairs Branch

Name of data bank: Directory of Scientists and Researchers

Type of data bank: Factual

Content summary:

The directory will list scientists and researchers active in all fields of arctic science and technology in Canada, and will contain cross-references to direct the reader to each researcher's expertise in the sciences from anthropology to zoology.

The first edition of the directory is distributed since the spring 1991, with copies going to the participants as well as to libraries and other organizations.

Environmental issues: In general.

Update frequency: To be determinded.

Computer system: Unspecified.

Producer: Department of Indian Affairs and Northern Development
Circumpolar and Scientific Affairs Branch
Ottawa, Ontario, K1A 0H4

Resources persons: Richard Bill or Gary Hall

Telephone: (819) 997-9595
(819) 997-9550

Fax:

Electronic mail address:

Additionals informations:

1.12 Department of Energy, Mines and Resources of Canada

1.121 Geological Survey of Canada

Name of data bank: Canadian Earthquake Data bank

Type of data bank: Numerical

Content summary:

The Geological Survey of Canada owns a collection of numerical data on the seismicity of the entire Canadian territory, including the seismic activity induced by the priming of dams of large hydro-electric complexes. Two seismic monitoring networks are permanently set up in the La Grande and Manicouagan regions. The data collected are continuously being processed and analysed. The installation of a seismograph is being considered for this region should Hydro-Québec go through with the Grande-Baleine project.

Environmental issues: Induced seismicity.

Update frequency: Daily.

Computer system: The numerical data on seismicity are available in ASCII code for outside users, for a fee of $ 60.00.

Producer:
Energy, Mines and Resources of Canada
Geological Survey of Canada
Seismology Section
1, Observatory Crescent
Ottawa, Ontario
K1A 0Y3

Resources persons:
Section Head: Robert G. North
Analyst: Maurice Lamontagne

Telephone: (613) 992-5038
(613) 995-0600

Fax: (613) 992-8836

Electronic mail address:

Additionals informations:

1.12 Department of Energy, Mines and Resources of Canada

1.122 Canadian Centre for Mapping

Surveys, Mapping and Remote Sensing Sector

Name of data bank: National Topographic Data Base (NTDB)

Type of data bank: Numerical

Content summary:

The digital National Topographic Data Base (NTDB) is produced for the automated production and maintenance of maps and as a basis for Geographical Information Systems (GIS) applications.

Digital data of three accuracy levels are being collected:

Level one: represents the most accurate data which is obtained through digital stereocompilation of selected areas of Canada at a scale of 1:50 000 - areas of high population density, major transportation routes, developing areas of strategic importance.

Level two: data is produced by the automatic digitizing (scanning) of existing 1:50 000 map reprographic over the portion of southern Canada not covered by level one.

Level three: data is produced by the automatic digitizing of 1:250 000 map reprographics for all of Canada. This was completed in September 1989.

Object: To create a national structured digital topographic data base for Canada which will satisfy requirements for national map revision and federal uses of GIS.

Areas of interest: As the national mapping agency the Canada Centre for Mapping is responsible for the collection of topographic information of the Canadian landmass in support of the National Topographic Data Base (NTDB).

Data is collected at the resource scale of 1:50 000 and the reconnaissance scale of 1:250 000 and portrays an inventory of specific features of the earth's surface.

Method of collection: Data produced by the Canada Centre for Mapping is collected through two methods:

- The electronic scanning of map reprographic to produce vectorized "cartographic" data;
- The stereo digitizing (photogrammetric methods) of data to produce highly accurate "positional" files.

Environmental issues: Data collected by the Topographical Mapping Division is used to support many environmentally related projects. These waste disposal site selection, damage assessment, water quality studies, soil erosion and wildlife management. In addition data has been used by both native groups and governments for land claims negociations and life style issues.

Update frequency: Unspecified.

Computer system: The data is available on nine (9) track magnetic tape in either Intergraph Design File (IGDS) or Interpraph Standard Interchange Format (ISIF).

Producer:

1- Data collection:

Energy, Mines and Resources of Canada
Canada Centre for Mapping
Topographical Mapping Division
615 Booth Street
Ottawa, Ontario, K1A 0E9

2- Data distribution:

Energy, Mines and Resources of Canada
Cartographic Information and
Distribution Centre
615 Booth Street
Ottawa, Ontario, K1A 0E9

Resources persons:

1- Data collection:

Michel Cardinal
A/ Head, Program Planning
Topographic Information and
Distribution Centre

Telephone:: (613) 992-4921
Fax: (613) 992-4961
Electronic mail address:

2- Data distribution: Peter Turner
Resource Coordinator
Cartographic Information and
Distribution Centre

Telephone:: (613) 992-0314
Fax:
Electronic mail address:

Additionnals informations:

The Québec territory are not complet covered by 1:50 000 map reprographic, only Saint-Lawrence valley are completed and ares of Saguenay will be available at the end of present program. Presently, the digital data from ares of North-Shore, Nottaway-Broadback-Rupert and La Grande Hydro-electric project are scanned and structured in 1:50 000 scale. Those maps should be in the status of digital topographic data during the program 1992. For more informations about 1:50 000 map reproduction call Peter Turner.

Conditions for the release of data:

a) The Canada Centre for Mapping must acknowledged as the source of the data;

b) The user will provide the Canada Centre for Mapping with an evaluation of the data;

c) The user will not release the data in original or altered forms to third parties without expressed written permission.

1.13 Environment Canada

1.131 Departmental Library

Name of data bank: ELIAS

Type of data bank: Bibliographical

Content summary:

The ELIAS data bank contains references to the holdings of about 15 Environment Canada libraries. The data bank catalogues periodicals, monographs, conference proceedings and technical reports. Part of the collection covers subjects related to federal environmental concerns regarding Northern Québec.

Environmental issues: In general.

Update frequency: Continual.

Computer system: This data bank can be accessed through the different departmental libraries or via the CAN\OLE system of the Canada Institute for Scientific and Technical Information.

Producer:
Environment Canada
Departmental Library
Place Vincent Massey
Ottawa, Ontario
K1A OH3

Resource person:
Agatha Bystram, Director
Document and Library Services Branch

Telephone: (819) 997-2485
Fax: (819) 997-1929
Electronic mail address:

Additionals informations:

Online access through departmental libraries.

1.13 Environment Canada

1.132 Environmental Assessment and Northern Québec Affairs Branch

Name of data bank: Northern Québec Specialists (EXPERT)

Type of data bank: Factual

Content summary:

This factual data bank contains information on experts on the Canadian and Québec Northland as well as on centres of expertise in Northland matters around the world. The data bank is available on the VAX of Conservation and Protection, Québec Region, through the telecommunications network. The data bank can be consulted interactively, and gives names, addresses, as well as information on the academic training and fields of activity of northland experts and centres. The information is obtained directly from the experts. The purpose of this data bank is to promote and facilitate the communication of environmental information within the federal government and to any outside organizations that might request it. This data bank is presently operational and contains about 100 organizations, 350 experts and 5 400 datas.

Environmental issues: In general.

Update frequency: Annually.

Computer system: Authorization to access the EXPERT data bank must be obtained before it can be consulted through the Conservation and Protection Service.

Producer:
Environment Canada
Conservation and Protection
Environmental Assessment and
Northern Québec Affairs Branch
EXPERT Data Bank
1 141 route de l'Église
P.O. Box 10 100
Sainte-Foy, Québec
G1V 4H5

Resource person: Pierrette Brochet

Telephone: (418) 648-4955
Fax: (418) 649-6213
Electronic mail address:

Additionals informations:

1.13 Environment Canada

1.133 Water Resources Branch

Name of data bank: HYDAT

Type of data bank: Bibliographical

Content summary:

Water quantity and sediment data collected by the Water Resources Branch of Environment Canada are stored in the HYDAT data bank. HYDAT contains descriptive information and geographical coordinates for all sites surveyed, dates and periods of operation for each station, as well as the type of hydrometric data collected.

Data on flow, water level, water temperature, suspended sediment concentration, sediment particle size and sediment load are recorded daily.

Environmental issues: Climatic variations and cumulative impact.

Update frequency: Monthly.

Computer system: HYDAT is a computer tape data bank system. At present, the system provides data in both printout lists and computer compatible forms. However, the bibliographical references have been copied on CD-ROM.

Producer:
Environment Canada
Water Resources Branch
Inland Waters Directorate
Ottawa, Ontario
K1A 0H3

Resource person: Quigg Tim

Telephone: (819) 997-2099
Fax: (819) 997-8701
Electronic mail address:

Additionals informations:

1.13 Environment Canada

1.134 Inland Waters Directorate

Name of data bank: AQUAREF

Type of data bank: Bibliographical

Content summary:

AQUAREF contains references on Canadian water resources and related environmental topics. These include environmental impact studies, ice and snow, habitats, agricultural hydrology, satellite-vein hydrology, forest hydrology, hydrometeorology, flooding, pollution, water resources, sedimentation and erosion.

The information is taken from Canadian and foreign journals, conference proceedings and official reports as well as from universities and research establishments.

Environmental issues: Canadian water resources and related environmental topics.

Update frequency: Bimonthly.

Computer system: AQUAREF can be accessed through the CAN/OLE system of the Canada Institute for Scientific and Technical Information.

Producer:
Environment Canada
WATDOC
Inland Waters Directorate
Ottawa, Ontario
K1A 0E7

Resource person: Ron Gauthier

Telephone: (819) 997-1238
(819) 997-2324

Fax: (819) 997-8701

Electronic mail address:

Additionals informations:

1.13 Environment Canada

1.134 Inland Waters Directorate

Name of data bank: D-REF

Type of data bank: Bibliographical

Content summary:

D-REF contains references on sources of data and information regarding water and related environmental topics, including hydrometeorology, water utilization and studies on hydrographic basins.

Environmental issues: Canadian water resources and related environmental topics.

Update frequency: To be determined.

Computer system: D-REF is not accessible for the time being.

Producer:
Environment Canada
WATDOC
Inland Waters Directorate
Ottawa, Ontario
K1A 0E7

Resource person: Ron Gauthier

Telephone: (819) 997-1238
(819) 997-2324

Fax: (819) 997-8701

Electronic mail address:

Additionals informations:

1.13 Environment Canada

1.135 Canadian Wildlife Service

Name of data bank: Bioindicators of the Contamination of Québec's Wildlife

Type of data bank: Numerical

Content summary:

The Canadian Wildlife Service, Québec Region, has developed a data bank on bioindicators using data obtained from documentation and unpublished sources. The data bank contains 26 000 records, each of which provides information on the average and/or maximum values of more than 200 compounds such as heavy metals, organochlorines, PCBs and dioxins. The selection of samples of taxonomic classes include mainly molluscs, fish, birds and mammals. The main types of tissue analysed are egg, liver, kidney and muscle tissue. The data are subdivided into seven major categories, 78 percent of which relate to the St. Lawrence system. The volume of data relating to James Bay and Hudson Bay are 5 percent and 16 percent respectively, while the sample inventory for Ungava Bay and Labrador make up at most 1 percent of the file content.

A data bank application is being developed on an IBM-compatible system to facilitate information management. Note that much of the data are the subject of a confidential study and cannot be disclosed until several years from now. Any consultation request should be addressed to the resource persons. It may be of interest that the National Wildlife Research Centre of the Canadian Wildlife Service in Hull set up the National Registry of Toxic Chemical Residues in 1963. It provides information on the results of analysis of contaminated tissue (e.g. egg, liver, muscle), particularly in birds and endangered species.

Environmental issues: Mercury, PCB and dioxins.

Update frequency: Irregular since 1970.

Computer system: The data are stored on an IBM-PC compatible, in ASCII code.

Producer:

Environment Canada
Canadian Wildlife Service
1 141 route de l'Église
P.O. Box 10 100
Sainte-Foy, Québec
G1V 4H5

Resources persons: Jean-Luc DesGranges or Jean Rodrigue

Telephone: (418) 649-6126
(418) 648-5016

Fax: (418) 649-6475

Electronic mail address:

Additionals informations:

The data bank contains a number of unpublished data that are the intellectual property of biologists of the Canadian Wildlife Service.

1.13 Environment Canada

1.135 Canadian Wildlife Service

Name of data bank: Québec Breeding Bird Atlas

Type of data bank: Factual

Content summary:

This data bank, specializing in the distribution of breeding birds, covers the southern part of Québec up to 50th of the Northern parallel. This area is subdivided into 10-km squares, on the Universal Transverse Mercator (UTM) grid. Each square groups the information collected from the various nesting indices. The use of distribution to determine the status of the various species will make the information gathered helpful for evaluating species conservation needs and analysing environmental impact. More precisely, this information makes it possible to determine which species are sensitive to utilization practices prevalent in the area and to assess the relative value of parks and ecological and wildlife areas.

The information on breeding birds included in this data bank relates to the southern sectors of the Nottaway-Broadback-Rupert complex and the North Shore of the St. Lawrence River.

Environmental issues: Cumulative impact, habitat conservation and world heritage.

Update frequency: Undetermined.

Computer system: All the information on species is currently kept in a data bank on VAX. A data consultation guide and technical assistance are available on-site. Mechanisms for data transfer in ASCII code are being developed and will be ready in 1992.

Producer:
Environment Canada
Canadian Wildlife Service
1 141 route de l'Église
P.O. Box 10 100
Sainte-Foy, Québec
G1V 4H5

Resources persons:
Jean Gauthier
Yves Aubry

Telephone: (418) 649-6132
Fax: (418) 649-6475
Electronic mail address:

Additionals informations:

1.13 Environment Canada

1.135 Canadian vildlife Service

Name of data bank: Waterfovl Habitats of the Northeast Coast of James Bay

Type of data bank: Numerical

Content summary:

Numerical information on surface areas and perimeters of different types of coastal habitats between the Castor River and Pointe-Louis-XV, James Bay, Québec. Based on photo-interpretation of 1:10 000 colour photographs taken in 1986.

Environmental issues: Migratory bird habitats.

Update frequency: Undetermined.

Computer system: Octometre - readily transferable to ASCII or DBASE.

Producer:
Environment Canada
Canadian Wildlife Service
1 141 route de l'Église
P.O. Box 10 100
Sainte-Foy, Québec
G1V 4H5

Resource person: Austin Reed

Telephone: (418) 648-6128
Fax: (418) 649-6475
Electronic mail address:

Additionals informations:

1.13 Environment Canada

1.136 Atmospheric Environment Service

Name of data bank: National Climatics Archives

Type of data bank: Numerical

Content summary:

The Canadian Climate Centre has been recording all meteorological and climatological data from Canadian stations regardless of their nature, location and period of operation since they were put into service. The nature and amount of data observed vary from one station to the next. For more details, a catalogue by geographical region specifies all the coordinates of all the climate stations, whether operational or not, and the observations available at the time the catalogue went to press. Information on the stations and programs included in the catalogue can be obtained by contacting the regional branch of the Atmospheric Environment Service. This information is available in the form of data cards or digitial data in ASCII code.

In Québec, a large number of meteorological and climate stations are located south of the fiftieth parallel. North of this parallel, the stations used for forecast purposes are located along the coastlines of James Bay, Hudson Bay and Ungava Bay as well as that of the Hudson Strait. These observations are clearly not very representative of the continental climates of Northern Québec. On the other hand, there are other unrecorded meteorological observations (temperature and precipitation) from automated continental stations. These data are currently being stored by the ministère de l'Environnement du Québec, with the atmospheric network division. These data are neither processed nor archived. Note that the Natashquan meteorological station has been moved to LG4.

The future impact of climate changes on the country's economic life and regional climate trend indicators are the subject of studies by the Atmospheric Environment Service.

Environmental issues: Local climate variations and worldvide climate changes.

Update frequency: Continual archiving.

Computer system: AS9 system, data available in ASCII code. There is a one-year delay between the time the data are recorded and the time they can be accessed.

Producer: Mike Webb

Environment Canada
Canadian Climate Centre
Marketing and Computing Information Section
4 905 Dufferin
Downsview, Ontario
M3H 5T4
(416) 739-4335

Resources persons: Jacques Miron
Roger Gauthier

Environment Canada
Atmospheric Environment Service
Regional Branch
10. Alexis Nihon Blvd., 3rd Floor
Saint-Laurent, Québec, H4M 2N8

Telephone: (514) 283-1296
(514) 283-1112

Fax: (514) 283-7149

Electronic mail address:

Additionals informations:

The Climate Change Digest is a publication of the scientific works available under the state of the environment reporting system.

1.14 Fisheries and Oceans Canada

1.141 Libraries Service

Name of data bank: WAVES

Type of data bank: Bibliographical and factual

Content summary:

WAVES contains two data banks. The first is a data bank of bibliographical references produced by the Department of Fisheries and Oceans Canada. The second is a factual data bank that includes a list of researchers and research organizations working in the area of fisheries and the marine sciences in Canada.

WAVES includes references to consultants' reports, working papers and internal studies on fisheries and the marine sciences, with emphasis on Canadian works and items of Canadian interest. Major subject areas include fisheries biology, fisheries technology, oceanography, marine chemistry, marine biology and ecology, environmental impact assessment, marine pollution, Law of the Sea, extended jurisdiction, marine geology and marine mammals. Special document collections included are departmental publications from all regions; the Bedford Institute of Oceanography's Environmental Assessment Document Collection; the Royal Commission on Seals and the Sealing Industry in Canada; and many others. File size: 75 000 bibliographical references.

Environmental issues: The marine environment, contamination of the environment by mercury, world heritage and cumulative impact.

Update frequency: Quarterly.

Computer system: The WAVES telereference data bank is currently available only through the libraries of the department of Fisheries and Oceans. A CD-ROM version of WAVES is currently marketed by Optim Corporation of Ottawa, and retails for $ 995.00 per year.

Producer:

Fisheries and Oceans Canada
Library Services Branch
10th Floor, Centennial Tower
200 Kent St.
Ottawa, Ontario
K1A 0E6

Resource person: Graeme Durkin

Telephone: (613) 993-0600
Fax: (613) 996-9230
Electronic mail address:

Additionals informations:

Marketed by: Optim Corporation
338 Somerset St. West
Ottawa, Ontario
K2P 0J9

Barbara Dumas
Telephone: (613) 232-3766
Fax: (613) 232-8413

1.2 GOUVERNEMENT DU QUÉBEC

1.21 Ministère de l'Environnement du Québec

1.211 Conservation and Ecological Heritage Branch

Québec Natural Heritage Data Centre

Name of data bank: Québec's Natural Heritage

Type of data bank: Bibliographical and Factual

Content summary:

The Centre for Data on Québec's Natural Heritage has been collecting information on rare, endangered and threatened species as well as on protected natural areas in Québec since 1988. Priority is given to the St. Lawrence River. This information will make it possible to administer the Act respecting threatened or vulnerable species. Moreover, the centre provides information on protected species, communities and protected natural areas. It employs the Biological and Conservation Data Management System developed by the Nature Conservancy (U.S.). The centre is also linked to the American data bank network called the Natural Heritage Programs.

The main descriptive parameters for species include distribution, habitat, biological characteristics, etc. The data bank contains information on protected natural areas, positioning (latitude and longitude), general and ecological characteristics, etc. Data on plant communities is currently being collected. Information is obtained from museums, herbariums, documentation and inventories.

Environmental issues: World heritage, cumulative impact, conservation of wildlife and wildlife habitat.

Update frequency: On an ongoing basis.

Computer system: Information distribution mechanisms are being developed. The Natural Heritage Data Centre keeps information on an IBM or IBM-compatible system. Data are available in ASCII and D-BASE codes. The Centre is currently working on mapping species distribution using the SPANS Geographic Information System operating on an IBM-PC computer.

Producer:	Ministère de l'Environnement du Québec Conservation and Ecological Heritage Branch 2 360 Sainte-Foy, 1st Floor Sainte-Foy, Québec G1V 4H2
Resource person:	Francis Boudreau
Telephone:	(418) 644-3358
Fax:	(418) 646-6169
Electronic mail address:	
Additionals informations:	

1.21 Ministère de l'Environnement du Québec

1.212 MENVIQ Documentation Centre

Name of data bank: ENVIRODOC

Type of data bank: Bibliographical

Content summary:

This computerized bibliographical directory contains a large number of studies on Northern Québec (monographs, departmental scientific and technical documents, surveys and reports). A new Northern collection was recently added to ENVIRODOC.

At present, this data bank is available only through the Environment Québec library. The department is in the process of instituting a new data bank structure that provides a better response to requests. The new system should be accessible through CAN/OLE in the course of 1991. Document research can be conducted through 12 access points: title, subject, author, type of document, year of publication, journal title, geographic descriptors, drainage basins, regional county municipalities, administrative regions, national cartographic survey system and census divisions.

ENVIRODOC contains dissertations and studies of all types as well as environmental documents and reports mainly from two organizations, the James Bay Advisory Committee on the Environment and the Kativik Environmental Advisory Committee.

The documentation centre makes available to outside users a series of internal reports entitled **Bibliographie en environnement** which may be consulted on-site only. Written reports of computer-assisted bibliographical research (American and international data banks) are also available to all. Outside organizations may consult these reports at the MENVIQ centre or borrow them through interlibrary loans.

Environmental issues: Cumulative impact, sustainable development and Native way of life.

Update frequency: Monthly.

Computer system: ENVIRODOC.

Producer:	Ministère de l'Environnement du Québec Documentation Centre 3 900 Marly, 3rd Floor Sainte-Foy, Québec G1X 4E4
Resource person:	Johanne Bélanger
Telephone:	(418) 644-3286
Fax:	(418) 643-0083
Electronic mail address:	
Additionals informations:	

1.22 Ministère des Forêts du Québec

1.221 Documentation Centre

Name of data bank: Lands and Forests

Type of data bank: Bibliographical

Content summary:

Established in 1968, this documentation centre handles all requests from outside of the ministère through interlibrary loans only. Despite its small size, this Northern collection covers the areas of mines, lands and forests throughout Québec. A number of other data banks within the ministère are also described on this data sheet.

Environmental issues: In general.

Update frequency: Continual.

Computer system: Unspecified.

Producer:
Ministère des Forêts du Québec
Documentation Centre
5 700 4th Ave. West
Charlesbourg, Québec
G1H 6R1

Resource person: Dorothée Fortin

Telephone: (418) 643-0720
Fax:
Electronic mail address:

Additionals informations:

1.22 Ministère des Forêts du Québec

1.222 Forest Inventory Data Division

Name of data bank: Forest Inventory

Type of data bank: Numerical

Content summary:

This numerical data bank is used to evaluate the economic potential of forested areas. It contains qualitative and quantitative information on the various timber stands by area units, especially south of the 52th parallel. The results can be mapped on a scale of 1:20 000.

Environmental issues: In general.

Update frequency: Continual.

Computer system: Unspecified.

Producer:
Ministère des Forêts du Québec
5 700 4th Ave. West
Charlesbourg, Québec
G1H 6R1

Resource person: André Tremblay

Telephone: (418) 643-4400
Fax:
Electronic mail address:

Additionals informations:

1.23 Ministère de l'Énergie et des Ressources du Québec

1.231 Geoscientific Data Division

Name of data bank: EXAMINE

Type of data bank: Bibliographical

Content summary:

EXAMINE contains more than 55 000 bibliographical references on geoscientific documents: departmental publications, mining operation files from companies and theses in the earth sciences. The fields of activity include geology in the broad sense, geochemistry, loose material, drilling and geophysics.

Environmental issues: In general.

Update frequency: Continual.

Computer system: Online access to this data is provided through the server of the company Services documentaires Multi-média Inc. of Montréal.

Producer:
Ministère de l'Énergie et
des Ressources du Québec
Geoscientific Data Division
5 700 4th Ave. West, Room A-201
Charlesbourg, Québec
G1H 6R1

Resource person: José Vinals

Telephone: (418) 646-2402
Fax: (418) 644-3814
Electronic mail address:

Additionals informations:

Services documentaires Multi-média Inc.
Marielle Boucher
1 685 Fleury St. East
Montréal, Québec
H2C 1T1
Telephone: (418) 382-0895

1.23 Ministère de l'Énergie et des Ressources du Québec

1.231 Geoscientific Data Division

Name of data bank: COGITE

Type of data bank: Factual

Content summary:

In 1987, the ministère de l'Énergie et des Ressources du Québec began computerizing data records on mineral deposits in Québec. The data sheets on mineral deposits in Québec summarize the geoscientific information available for each indicator of metallic and industrial minerals or construction materials.

Environmental issues: Environmental contaminants.

Update frequency: Daily.

Computer system: This data bank, which is being developed, will make it possible to disseminate data records on paper or diskette. The data on mineral deposits will be accessible by IBM-PC. Data can be transferred in ASCII or D-BASE codes.

Producer:
Ministère de l'Énergie et
des Ressources du Québec
Geoscientific Data Division
5 700 4th Ave. West, Room A-201
Charlesbourg, Québec
G1H 6R1

Resource person: Yves Bellemare

Telephone: (418) 643-3139
Fax: (418) 644-3814
Electronic mail address:

Additionals informations:

1.23 Ministère de l'Énergie et des Ressources du Québec

1.231 Geoscientific Data Division

Name of data bank: Geochemical Data Bank on Québec (BADGEQ)

Type of data bank: Numerical

Content summary:

BADGEQ is a bank of geochemical data on Québec. It contains data on nearly 400 000 samples covering 50 percent of Québec's territory, with findings from analysis of soil and lake sediment, stream, groundwater and till samples. The number of elements covered in the chemical analysis range from three, for the first surveys conducted in 1963 to 42 for surveys conducted in 1988. In addition to the 42 chemical parameters, some lake sediment and groundwater samples provide information on the pH level and geology.

Environmental issues: Environmental contaminants and cumulative impact.

Update frequency: Twice weekly.

Computer system: Data from the file, in ASCII code, may be transferred to other applications in an IBM compatible environment.

Producer:
Ministère de l'Énergie et
des Ressources du Québec
Geoscientific Data Division
5 700 4th Ave. West, 2nd Floor
Charlesbourg, Québec
G1H 6R1

Resource person: Michel Leduc

Telephone: (418) 646-2613
Fax: (418) 644-3814
Electronic mail address:

Additionals informations:

1.3 UNIVERSITIES

1.31 University of Québec at Abitibi-Témiscamingue

Name of data bank: BADADUQ

Type of data bank: Bibliographical

Content summary:

In September 1984, the **James Bay Development Corporation**, as part of the reorientation of its activities after completion of phase I of the La Grande hydro-electric project, turned over its entire documentation centre to UQAT. Also, Professor Louis-Edmond Hamelin donated his collection relating to the various aspects of the northland on an international scale.

Users can consult BADADUQ by using the descriptors JAMBIBL (for the collection from the JBDC, JBEC and Prof. Hamelin) and NORDICITÉ for the rest of the library's documents relating to the northland.

The BADADUQ telereference system can be accessed through DATAPAC. The Conservation and Protection library currently has a direct communication link with BADADUQ.

Included in the NORDIQUE collection at UQAT are:

- Hydrological survey reports from approximately 20 hydrometric stations, covering the rivers as well as 173 lakes of the territory;
- Reports of studies on marine plants, phytoplankton, zooplankton, insects and fishes;
- The survey reports of 45 weather stations;
- Wildlife studies: moose, caribou, geese, ducks, beavers, etc.;
- A remote sensing bank with 1 500 Landsat photographs and 7 000 colour aerial or infrared photographs.

This bank, which holds 240 000 inventory data records describing the 41 000 units of the territory under study, is currently being updated in cooperation with Hydro-Québec's Environment Branch. This data bank is available in Montréal.

Additions of:

- 15 000 colour and black and white photographs;
- 4 000 slides;
- 11 000 monographs;
- thousands of maps representing the entire territory, thematically or topographically;
- various reports on archaeological work conducted in the territory; ethnographic studies relating to the Native inhabitants of the region; the economic outlook concerning electricity, forestry, mining and recreational activities.

Environmental issues: Native way of life, fish habitat, marine environment, conservation of wildlife and wildlife habitat, management of Northern waters, conservation of the Lac à l'Eau Claire Basin, mercury contamination of the environment and the food chain, world heritage and cumulative impact.

Update frequency: Bimonthly.

Computer system: INFOPUQ.

Producer: University of Québec at
Abitibi-Témiscamingue
42 Mgr. Rhéaume
P.O. Box 8000
Rouyn-Noranda, Québec
J9X 5M5

Resource person: André Béland

Telephone: (819) 762-0931, ext.: 1336
Fax: (819) 797-4727
Electronic mail address:

Additionals informations:

1.32 University of Québec at Chicoutimi

1.321 Paul-Émile-Boulet Library

Name of data bank: DOMYNO

Type of data bank: Bibliographical

Content summary:

Created in 1978, DOMYNO is currently beingmanaged by the Paul-Émile-Boulet Library, which took over from the Centre d'Étude du Moyen-Nord québécois (Centre for Northern Québec Studies) in 1986.

DOMYNO covers primarily regional studies and campaigns and the earth sciences and, second, northland engineering and Indian studies. No discipline is excluded from this data bank.

The bibliographical data are selected geographically: they concentrate primarily on the Saguenay-Lac-Saint-Jean region and Northern Québec, which is situated approximately between the 48th and 58th Northern parallels.

For greater efficiency, DOMYNO is divided into four smaller data banks:

1- General engineering studies: applied sciences;
2- Geographic maps of the Saguenay, Lac-Saint-Jean and Northern Québec regions incorporated in books or articles;
3- Saguenay-Lac-Saint-Jean: multidisciplinary documentation;
4- Northern Québec: multidisciplinary documentation emphasizing the earth sciences.

A wide variety of documents are collected:

- journal articles and excerpts from monographs and geological reports, all available from the university library;
- regional press clippings;
- unpublished offprints from regional conferences university-level student papers, non-commercial reports or documents.

All the documents entered in the bank since 1983 are available at the UQAC library. The location of documents dating before this is indicated in the bibliographical note.

Environmental issues: In general.

Update frequency:	Monthly (irregular).
Computer system:	DOMYNO on VAX 6310.
Producer:	Université of Québec at Chicoutimi Paul-Émile-Boulet Library 500, boul de l'Université Chicoutimi, Québec G7H 2B1
Resource person:	Françoise Lange
Telephone:	(418) 545-5011, ext.: 2222
Fax:	(418) 649-6213
Electronic mail address:	
Additionals informations:	

1.32 University of Québec at Chicoutimi

1.322 Québec Invertebrates Wildlife Data Centre and Entomofaune du Québec inc.

Name of data bank: BADIQ

Type of data bank: Numerical

Content summary:

The Data Bank on Invertebrates in Québec will be developed on the basis of a new organizational and computerized system for the conservation, management and processing of scientific data on insects and other invertebrates. This tool, which is currently being developed, will make it possible to analyse millions of data items on some 32 000 species living in Québec. This data bank includes very elaborate taxonomic and ecological elements. Thus, moe than 150 variables and the links between them will make it possible to characterize and describe survey areas and to identify organisms. Tables of parameters can be used to specify the nature of the habitat: plant structure, physiographic description, climatic conditions, physical an chemical data, relationships between organisms. The bank will cover all Québec regions and the information will be accessible only in 1993. However, computerized data on certain orders of insects can be made available, as required.

Environmental issues: Sustainable development, environmental contaminants (bioindicators), cumulative impact, endangered species and inventories.

Update frequency: To be determined.

Computer system: The system runs on the ORACLE relational data bank, with a data capture and cartography program, etc., and will constitute the framework of the centre. The system may possibly be offered under license or sold.

Producer:
University of Québec at Chicoutimi
Québec Invertebrates Wildlife Data Centre
and Entomofaune du Québec Inc.
555, boul. de l'Université
Chicoutimi, Québec
G7H 2B1

Resource person:	André Francoeur
Telephone:	(418) 545-5011, ext.: 2334
Fax:	(418) 545-5012
Electronic mail address:	
Additionals informations:	

1.33 Laval University

1.331 Centre for Northern Studies

Name of data bank: Nordicana

Type of data bank: Bibliographical

Content summary:

Created in 1961, the Centre for Northern Studies brings together natural science researchers studying Northern environments and paleoenvironments. The work is carried out in arctic and sub-arctic biogeographic zones. The researchers' fields of expertise are the following: Quaternary geomorphology; Recent paleoecology; periglacial and littoral geomorphology; study of the permafrost; ecology of Northern forests, and peaty and riparian environments; taxonomy of Northern plants, ecology of insects and caribou. The centre operates a field research station located in Whapmagoostui-Kuujjuarapik, on the East Coast of the Hudson Bay, whose area of operation extends to Ungava Bay.

Among other things, the Nordicana collection provides access to workson Northern matters such as conference proceedings, lexicons, monographs, essays and theses. The collection holds a wealth of literature on the problems of Québec's Northern regions. Dendrochronology provides a tool for analysing and identifying climatic trends in Northern regions.

Environmental issues: Conservation of habitats, cumulative impact, world heritage and climatic changes.

Update frequency: Continual.

Computer system: Reference system on MacIntosh or IBM-PC.

Producer:
Laval University
Centre for Northern Studies
Cité universitaire
Sainte-Foy, Québec
G1K 7P4

Resource person: Louise Filion

Telephone: (418) 656-3341
Fax: (418) 651-3419
Electronic mail address:

Additionals informations:

The centre is composed of three research laboratories:

1- Radiochronology and Paleoecology Laboratory

Person in charge: Michel Allard
Telephone: (418) 656-5416

2- Dendrochronology Laboratory

Person in charge: Louise Filion
Telephone: (418) 656-3340

3- Plant Ecology Laboratory

Person in charge: Gilles Houle
Telephone: (418) 656-2691

1.33 Laval University

1.332 Circumpolar and Inuit Studies Group (GETIC)

Name of data bank: Métri-Nord | Native voices

Type of data bank: Bibliographical | Numerical | Factual

Content summary:

The three data banks contain information on the Native people of Northern Québec, Labrador, the Northwest Territories, Alaska and Greenland.

1- Métri-Nord: will contain economic and demographic data;

2- Native voices: will contain essentially rav data gathered from the Inuit on their experiences;

3- The third data bank will contain more than 1 000 bibliographical reference titles primarily from scientific works in the area of social sciences.

Environmental issues: Native way of life, world heritage and environmental impact.

Update frequency: To be determined.

Computer system: The electronic reference system which will contain information from the three GETIC data banks is currently being developed.

Producer:
Laval University
Circumpolar and Inuit Studies Group
Cité universitaire
Sainte-Foy, Québec G1K 7P4

Resource person: Marc-Adélard Tremblay

Telephone: (418) 656-7596
(418) 656-3775

Fax: (418) 656-3023

Electronic mail address:

Additionals informations:

1.33 Laval University

1.333 Québec Interuniversity Oceanography Research Group (GIROQ)

Name of data bank: Grande rivière de la Baleine and coastal area of the Hudson Bay

Type of data bank: Bibliographical, factual and numerical

Content summary:

The purpose of the data gathered from 1988 to 1990 is to study the relationship between the spring flow of the Grande rivière de la Baleine and various biological parameters of the coastal area of the Hudson Bay such as primary production (ice, algae and phytoplankton), production of zooplankton, the emergence of fish larvae, their nutrition and survival. These data could be used to assess the impact of a change in the river's winter flow with respect to the different parameters studied.

Parameters measured:

* Physical measurements:

  - meteorology (temperature, wind, radiation, etc.);
  - ice (snow and ice thickness);
  - salinity, temperature versus depth;
  - current measurement (direction and speed of current);
  - sub-glacial irradiance;
  - tidal range;
  - flow at river mouth.

* Primary production data:

  - concentrations of nutritional salts;
  - cellular content;
  - algal diversity;
  - algal biomass;
  - algal production;
  - sedimentation.

* Secondary production data (zooplankton and fish larvae):

  - seasonal abundance;
  - algal profiles;
  - abundance of fish larvae;
  - morphometric measurements and digestive content of larvae.

The regions of interest are the coastal area of the Southwestern part of Hudson Bay affected by the plume of the Grande rivière de la Baleine.

Environmental issues: Fish habitat, marine environment and cumulative impact.

Update frequency: Unspecified.

Computer system: The data are currently on an IBM-PC compatible microcomputer and will be transferred to a larger system at the Maurice-Lamontagne Institute by the fish section.

Producer:
Laval University
Québec Interuniversity Oceanography Research Group (GIROQ)
Alexandre Vachon Pavillon
Sainte-Foy, Québec
G1K 7P4

Resource person: Louis Legendre

Telephone: (514) 656-5917
Fax: (514) 656-5902
Electronic mail address:

Additionals informations:

- Physical measurements: Person in charge: Claude Bélanger
  McGill University
  Meteorology Department
  Telephone: (514) 398-4400

- Primary production data: Person in charge: Gene Rosenberg
  Laval University
  Telephone: (418) 656-2361

- Secondary production data: Person in charge: Dominique Ponton
  Laval University
  Telephone: (418) 656-2562

1.34 McGill University

1.341 McGill Subarctic Research Station, Schefferville

Name of data bank:

1- Routine measurements of lake icetickness, snowcover and meteorology parameters.

2- Data collected by numerous Researchers in many disciplines.

Type of data bank: Numericals

Content summary:

Main area of intercept: the Schefferville region of Northern Québec. Data published in the McGill Subarctic Research Papers, unpublished M.Sc. and Ph.D. theses from several universities, and papers in refereed journals.

Research fields include geomorphology, meteorology, climatology, permafrost, snow, lake ice, soils, botany, limnology, entomology, parasitology, hydrology and other physical environmental sciences.

Availability: McGill Subarctic Research Papers are available from the Centre for Northern Studies of McGill University.

Environmental issues: In general.

Update frequency: Unspecified.

Computer system: Unspecified.

Producer:
McGill University
Centre for Northern Studies and Research
Burnside Hall
805 Sherbrooke St. West
Montréal, Québec
H3A 2K6

Resource person: Dr. Wayne Pollard

Telephone: (514) 398-4454
Fax: (514) 398-8364
Electronic mail address:

Additionals informations:

1.35 University of Montréal

1.351 Geology Department

Name of data bank:

1- Analysis results of samplings of sediments and lakes in Ungava.

2- Mineralogical and geochemical analysis results from surface samples around the Cratère du Nouveau-Québec.

3- Results of sedimentological and geochemical analysis of 637 glacial sediment samples in Ungava.

Type of data bank: Factual

Content summary:

The three data banks available are mainly factual and only one is computerized.

1) **Non-computerized data;** Analysis results of samplings of sediments and lakes in 1983 and 1984 north of Québec's 55th parallel in Ungava. Includes sedimentary, mineralogical and geochemical data on 92 soil samples taken from 16 sites in Ungava, as well as biophysical data, including the pH levels of 16 lakes; these data are kept mainly in Environment-Civil Engineering (cf Delisle). The analysis results and all the data are in the monograph:

Les précipitations acides et leurs effets potentiels au nord du 55e parallèle du Québec; Collection Environnement et Géologie, Université de Montréal, Volume 2, 280 pages.

2) **Non-computerized data;** Mineralogical and geochemical analysis results from 108 surface samples around the New Québec Crater, sedimentological and biophysical analysis of a few sediment samples from the bottom of the crater's lake and, finally, biophysical data on the crater's lake itself. Most of these data are kept at the Geology Department (cf Bouchard). The analysis results and most of the data can be found in the monograph:

Bouchard, M.A., 1989. L'histoire naturelle du Cratère du Nouveau-Québec; Collection Environnement et Géologie, Université de Montréal, Volume 7, 420 pages.

Canadian Journal of Botany, 1990, Volume 68, pp. 1187-1200.

3) **Computerized data;** Results of sedimentological and geochemical analysis of 637 glacial sediment samples distributed over a regular grid in Ungava between latitudes 58 and 61 north. These datas are available from the Department of Geology (cf Bouchard); they are combined in the following work:

Bouchard, M.A., in press (being revised). Glacial geology, glacial dispersal and till geochemistry, Ungava, Northern Québec; Geological Survey of Canada, Bulletin.

Environmental issues: Climatic variations, environmental contaminants and world heritage.

Update frequency: Periodic.

Computer system: Unspecified.

Producer:

University of Montréal
Geology Department
P.O. Box 6128
Station A
Montréal, Québec
H3C 3J7

École Polytechnique
Section Environnement du Génie Civil
P.O. Box 6079
Station A
Montréal, Québec
H3C 3A7

Resources persons: Michel A. Bouchard

Claude E. Delisle

Telephone: (514) 343-7542
(514) 340-4962

Fax: (514) 343-5782

Electronic mail address:

Additionals informations:

The Environment and Geology Collection contains a wealth of very interesting literature on the environmental problems facing Northern Québec.

A copy of data bank no. 3 is also available from ministère de l'Énergie et des Ressources du Québec, Geology Branch, Geochemistry Section.

1.35 University of Montréal

1.352 Physical and Quaternary Geography Journal

Name of data bank: Index of Physical and Quaternary Geography Journal

Type of data bank: Bibliographical

Content summary:

This scientific journal, known under this title since 1977, succeeds the Revue de Géographie de Montréal (Montréal Geography Journal), which was founded in 1947. The physical and quaternary geography journal publishes original works on the processes that shape the earth's surface (geomorphology, climatology, hydrology, biogeography), particularly in current or ancient glacial and periglacial environments. The journal also publishes the findings of research on the Quaternary, a period studied in numerous disciplines, from geology to archaeology and biology. The research works published highlight the environmental problems of a number of regions in Northern Québec and outside Québec.

Environmental issues: Permafrost evolution, treeline fluctuation, paleophytogeographic reconstitutions and climatic changes.

Update frequency: Continual.

Computer system: Unspecified.

Producer:
University of Montréal
Les Presses de l'Université de Montréal
P.O. Box 6128
Station A
Montréal, Québec
H3C 3J7

Resource person: Nicole Carette, Coordinator

Telephone: (514) 343-8050
Fax: (514) 343-8008
Electronic mail address:

Additionals informations:

Author and title index and subject index of all the material published since 1977.

1.36 University of Western Ontario

1.361 Social Science Computing Laboratory

Name of data bank: Canadian Register of Research and Researchers in the Social Sciences (REGISTER)

Type of data bank: Factual

Content summary:

The University of Western Ontario has established a data bank of researchers in the social sciences in order to centralize and allow for information exchange in the field. Researchers can also use the register to establish contact with organizations interested in engaging their services or to find out about research findings in the social sciences. The register contains information not only on areas that have been traditionally associated with the social sciences, but also on research in law, education, management, industrial relations, employment research, urban studies, regional and national studies, environmental studies and the domestic economy. File size: 4,000 records.

Environmental issues: Native way of life, cumulative impact and contaminants.

Update frequency: Quarterly.

Computer system: CAN/OLE.
The National Library of Canada has loaded part of the REGISTER in the CANREG data bank of the Canadian Online Enquiry Service (CAN/OLE). CANREG contains participants' areas of specialization, research projects as well as references to their publications.

The first edition of the REGISTER on CD-ROM disc is being prepared.

Producer: University of Western Ontario
Faculty of Social Science
The Register, Social Science Computing Laboratory
London, Ontario, N6A 5C2

Resource person: Karen Stafford

Telephone: (519) 661-2111 \ 661-2152, ext.: 5060
Fax: (519) 661-3868
Electronic mail address: REGISTRE@UWOVAX

Additionals informations:

1.4 PARAGOVERNMENTAL ORGANIZATIONS

1.41 Laval University Hospital

Community Health Department

Name of data bank: Contaminants in the Canadian Arctic Marine Food Chain

Type of data bank: Factual

Content summary:

This factual data bank contains information on contaminants of the marine food chain. The territory covered by the data bank includes all of the Canadian Arctic North of the 52th parallel, Greenland and the James Bay area. The Hudson and Ungava regions represent 1/5 of the compiled data. At present, there are 102 sampling sites for the Ungava region and 93 for the Hudson region. More than 100 animal species that are part of the human diet are listed, namely invertebrates, marine mammals, fish, aquatic birds and fish-eating birds. The inventory also contains data on humans (Crees and Inuits) and species that are representative of contamination in humans (Polar Bears). The information is compiled in the form of standard data records on which are found basic items of information such as the animal group and species, the number of samplings analysed, the age and sex of the specimen, the site and date of the sampling and the authors of the study. The data records also include information relating to the analysis, i.e. the type of tissue analysed, the percentage of water and fat, the contaminant, the concentration (minimum, maximum, standard deviation, mean) and the analysis method used. In all, more than 30 tissues and organs are listed and 84 contaminants are identified among the heavy metals and the organochlorines. The survey inventory on contaminants covers the period from the beginning of the 1970s to the present.

Other items of information included are bibliographical references, the date of the sampling and the analysis method used. File size: 10 000 records.

Environmental issues: Contaminants of the environment and the food chain.

Update frequency: Continual.

Computer system: Reference system developed on MacIntosh.

Producer:	Laval University Hospital Community Health Department Health and Environment 2 050, boul. Saint-Cyrille Ouest Sainte-Foy, Québec G1V 2K8
Resources persons:	Éric Dewally; Hélène Careau; Denis Gauvin; Anne Vézina
Telephone:	(418) 687-1090
Fax:	(418) 681-5635
Electronic mail address:	
Additionals informations:	

1.42 **Hydro-Québec**

1.421 **General Secretariat, Library Service**

Name of data bank: RIDAQ

Type of data bank: Bibliographical

Content summary:

All the documentation is catalogued on RIDAQ, the computerized information network which is accessible only through the Hydro-Québec library.The documentation centre of the Vice-president's Office, Environment, cooperates in updating the data bank. Its collection contains environmental and social impact studies on the North commissioned by Hydro-Québec as well as a small portion of the Northern collection of the James Bay Energy Corporation (JBEC) documentation centre.

The topics covered in the documentation include: mercury in reservoirs, wildlife habitat and resources, the region's structure and organization, the landscape and the natural and cultural heritage, forest dynamics, regional economies, inhabitants' way of life and social values.

The documents integrated into the data bank deal with the regions in which hydro-electric development projects are or will be under way in Québec.

Environmental issues: Contaminants of the environment and the food chain, wildlife habitat and resources, Native way of life, Northern waters management, cumulative impact and world heritage.

Update frequency: Daily.

Computer system: Unspecified.

Producer: Hydro-Québec, Vice-President's Office
Coordination and Services
1 010 St. Catherine East, 4th Floor
Montréal, Québec
H2L 2G3

Resource person: Section Head: Benoît Podesto
Documentation: Johanne Nicols

Telephone: (514) 985-7279 (Section Head)
(514) 985-7125 (Documentation)

Fax:

Electronic mail address:

Additionals informations:

1.42 Hydro-Québec

1.422 Digital Cartography Service

Name of data bank: 1- Jurdant's Ecological Survey for the James Bay.

2- Environmental Study of the Grande-Baleine Project.

Type of data bank: Numericals

Content summary:

The office of the vice-president, Environment has developed ecological data banks that are part of its computer-assisted cartography system. These data include information from Jurdant's ecological survey (inventaire du capital nature) for the James Bay and Lower North Shore regions. A number of capability indices have been developed in relation to the land and water systems.

A number of other data banks have been created within the framework of the environmental study of the Grande-baleine Project, notably, on vegetation, wildlife, and land use by Natives.

Environmental issues: Contaminants of the environment and the food chain, wildlife habitat and resources, Native way of life, Northern waters management, cumulative impact and world heritage.

Update frequency: Unspecified.

Computer system: Unspecified.

Producer:
Hydro-Québec, Vice-President's Office
Direction Études d'Impact
Service localisation
1 010 St. Catherine East, 4th Floor
Montréal, Québec
H2L 2G3

Resource person: Consultant on spatial information systems:

Lise Allard
Danielle Camden

Telephone: (514) 985-7103
Fax: (514) 985-7102
Electronic mail address:

Additionals informations:

1.5 NATIVE GROUP

1.51 Makivik Corporation

Makivik Research Development Department

Name of data bank: 1- Makivik Documentation Centre

2- Use of Land and Hunting Areas

Type of data bank: Bibliographicals

Content summary:

In 1975, the Makivik Corporation established a research department to assist in the implementation of compensation payments granted to the Inuit of Northern Québec pursuant to the James Bay and Northern Québec Agreement for political, economic, social and cultural purposes. The documentation deals with such varied topics as the environment, geography, anthropology, ethnology, archaeology, culture, history, hunting and fishing, the economy, air transportation, energy, etc. The department conducts research on whales, Arctic char, contaminants (PCB and mercury contamination of reservoirs) and their impact on the Koksoak River.

A data bank on the use of land and hunting areas is being developed.

Environmental issues: Contamination of the environment and the food chain, Native way of life, world heritage and habitat management.

Update frequency: Unspecified.

Computer system: Unspecified.

Producer:
Makivik Corporation
Research Development Department
650 32nd Ave.
Lachine, Québec
H8P 1Y4

Resource person: Stas Olpinski

Telephone: (514) 634-8091, Montréal
(819) 964-2951, Kuujjuaq

Fax: (819) 964-2230, Kuujjuaq

Electronic mail address:

Additionals informations:

2. CIRCUMPOLAR REGIONS

2. CIRCUMPOLAR REGIONS

This section describes nine bibliographicals data banks whose references correspond mainly to the Canadian North and Europe. However, they provide little information on Québec. The purpose of including them in this directory is mainly to expand the reference sources and provide an indication of the status of knowledge regarding projects similar to those planned for Northern Québec.

2.1 Arctic Institute of North America

Name of data bank: Arctic Science and Technology Information System (ASTIS)

Type of data bank: Bibliographical

Content summary:

With the support of other centres working in the area of polar research, ASTIS is currently developing an information system on the Canadian polar region.

ASTIS is one of the most important reference sources on Canada's cold regions. The references cover a number of areas, such as the natural sciences, renewable and non-renewable resources, economic and social conditions, land management, Native people, archaeology and government publications. The emphasis of the 28 000 documents catalogued since 1978 is on polar regions and the Canadian Arctic. The reference sources are periodicals, monographs, theses, conference reports as well as published and unpublished reports.

Environmental issues: Native way of life, habitat, marine environment, contamination and cumulative impact.

Update frequency: Bimonthly.

Computer system: Q.L. System Inc.

Producer:
University of Calgary
Arctic Institute of North America
2 500 University Drive, N.W.
Calgary, Alberta, T2N 1N4

Resource person: Ross Goodwin

Telephone: (403) 220-4036
Fax: (403) 282-7298
Electronic mail address: Telecom Canada (Envoy 100): ASTIS

Additionals informations:

2.2 Boreal Institute for Northern Studies Library

Name of data bank: BOREAL

Type of data bank: Bibliographical

Content summary:

BOREAL contains references to documents in a number of fields of study, including ecology, geology, geography, engineering, glaciology, health, Aboriginal peoples and land claims in the regions of Alaska, Greenland, Iceland, Scandinavia and the U.S.S.R. This data bank places the emphasis on the western regions of the Canadian Arctic and on Central Canada. It contains documents on the mid-Canada corridor development and all Canadian pipeline construction projects. This data bank contains more than 43 000 references to material catalogued since 1977, including book reviews, monographs, theses, government documents, consultants' reports and conference proceedings. Finally, a number of scientific periodicals and conference proceedings are provided by the Scott Polar Research Institute of England.

BOREAL contains a wealth of documentation on studies of hydro-electric development projects for Canadian provinces.

Environmental issues: Native way of life, habitat, marine environment, water management, contamination and cumulative impact.

Update frequency: Monthly.

Computer system: CAN\OLE.

Producer:
University of Alberta
Boreal Institute for Northern Studies
Library Services
CW 401, Biological Sciences Building
Edmonton, Alberta
T6G 2E9

Resource person: G.A. Cooke

Telephone: (403) 432-4409
Fax: (403) 432-1153
Electronic mail address: (Envoy 100), "BOREAL.ILL.BOREAL"
NETWORKS: BINS

Additionals informations:

2.2 Boreal Institute for Northern Studies Library

Name of data bank: Yukon Bibliography (YKB)

Type of data bank: Bibliographical

Content summary:

This data bank catalogues references relating almost exclusively to the Yukon Territory, in fields of study such as climate, geography, geology, permafrost, glaciology, entomology, agriculture, hydro-electric dams and hydrology, Native people, vegetation, education and sociology. The data bank contains bibliographical references to more than 4 700 documents, spanning the period from 1971 to the present. The titles are taken from scientific periodicals, monographs, theses, as well as government and private industry reports.

Environmental issues: Native way of life, habitat, marine environment, water management, contamination and cumulative impact.

Update frequency: Annual.

Computer system: Q.L. System Inc.

Producer:
University of Alberta
Boreal Institute for Northern Studies Library
CW 401, Biological Sciences Building
Edmonton, Alberta
T6G 2E9

Resource person: G.A. Cooke

Telephone: (403) 432-4409
Fax: (403) 432-1153
Electronic mail address: (Envoy 100), "ILL.BOREAL"
NETWORKS: BINS

Additionals informations:

2.3 Cold Regions Research and Engineering Laboratory (CRREL)

Name of data bank: COLD

Type of data bank: Bibliographical

Content summary:

This data bank contains 150 000 references to documents catalogued since 1951 in periodical lists (abstracts), scientific periodicals, monographs, technical reports and conference proceedings relating specifically to international regions bordering on the Arctic, the Antarctic and the Arctic Ocean. COLD covers a number of subjects such as: politics, the natural sciences, civil engineering, hydrology, meteorology, geography, the military sciences, mathematics and navigation. The data bank also contains an impressive collection on studies regarding permafrost, snow, ice and glaciers.

Environmental issues: Native way of life, habitat, marine environment, water management, contamination and cumulative impact.

Update frequency: Four times per year.

Computer system: ORBIT.

Producer: Cold Regions Research and Engineering Laboratory (CRREL)
72 Lyme Road
Hanover, NH 03755-1290, USA

Resource person: Nancy C. Liston

Telephone: (603) 646-4238
Fax: (603) 646-4278
Electronic mail address:

Additionals informations:

Digital Disc, NHRC
Government of Canada
Saskatchevan

The National Hydrology Research Centre has acquired a digital disc copy of this data bank. Telephone: (306) 975-5077.

2.4 Dialog Information Services Inc.

Name of data bank: DIALOG

Type of data bank: Bibliographical

Content summary:

The DIALOG telereference system combines more than 350 data banks from a broad range of scientific disciplines, such as the environment, energy, water, nuclear pover, oceanography and pollution. DIALOG contains four types of records, namely, bibliographical references, information directories, numerical data on statistics and full-text records for some legal publications.

Environmental issues: Native way of life, habitat, marine environment, water management, contamination and cumulative impact.

Update frequency: Continual.

Computer system: Unspecified.

Producer:
Micromedia Ltd./ DIALOG
185 Pearl Street
Toronto, Ontario
M5H 1L3

Telephone: (416) 593-5211
Fax: (416) 493-1760
Electronic mail address:

Additionals informations:

2.5 National Research Council of Canada

Canada Institute for Scientific and Technical Information

Name of data bank: ENERGYLINE

Type of data bank: Bibliographical

Content summary:

ENERGYLINE has been cataloguing information on hydraulic, solar, wind, nuclear and thermal energy since 1971. The data bank contains about 65 000 references on the consumption, conservation, storage and transportation of energy as well as energy research and development. Energyline also contains data on hov to save energy when using electric light bulbs, residential heat pumps, efficiency of electrotechnology, insulation of vater heaters, cogeneration, etc.

Environmental issues: In general.

Update frequency: Monthly.

Computer system: DIALOG.
Energyline can be accessed through the CAN\OLE system.

Producer: National Research Council of Canada
Canada Institute for Scientific and Technical Information
Literature Search Services
Ottava, Ontario
K1A OS2

Resource person:

Telephone: (613) 993-2013
Fax: (613) 952-8244
Electronic mail address:

Additionals informations:

This data bank can be consulted through the Environment Canada library. The Literature Search Services of the Canada Institute for Scientific and Technical Information provides assistance for reference searching.

2.5 National Research Council of Canada

Canada Institute for Scientific and Technical Information

Name of data bank: ENVIROLINE

Type of data bank: Bibliographical

Content summary:

ENVIROLINE is a bibliographical data bank that, since 1971, has been covering general environment-related subjects as well as more specific ones such as pollution (air, water, noise, waste, etc.), climate changes (greenhouse effect, droughts, etc.), oceans, ecology, non-renevable energy and resources, forms of contamination (biological, chemical, radioactive, etc.) and land development. This American data bank contains 130 000 bibliographical references and has a monthly input of about 1 000 new entries (magazine and newspaper articles, conference or convention proceedings, research or study reports, etc.). ENVIROLINE is listed in the Environment Abstracts directory.

Environmental issues: Mercury contamination and cumulative impact.

Update frequency: Monthly.

Computer system: Unspecified.

Producer:
National Research Council of Canada
Canada Institute for Scientific and Technical Information
Literature Search Services
Ottawa, Ontario
K1A 0S2

Resource person: Unspecified.

Telephone: (613) 993-2013
Fax: (613) 952-8244
Electronic mail address:

Additionals informations:

This data bank can be consulted through the Environment Canada library. The Literature Search Services of the Canada Institute for Scientific and Technical Information provides assistance for reference searching.

2.5 National Research Council of Canada

Canada Institute for Scientific and Technical Information

Name of data bank: Medical Literature Analysis and Retrieval System (MEDLARS)

Type of data bank: Bibliographical

Content summary:

MEDLARS is the computerized literature retrieval system of the U.S. National Library of Medicine. This comprehensive system of online data banks, which provides access to over 10 million references to journal articles and books, gives health professionals access to literature published worldwide in their field of interest.

Environmental issues: Native way of life, habitat, marine environment, contamination and cumulative impact.

Update frequency: Continual.

Computer system: CAN\OLE.

Producer:
National Research Council of Canada
Canada Institute for Scientific and Technical Information
Literature Search Services
Ottawa, Ontario
K1A 0S2

Resource person: Mary Lov

Telephone: (613) 993-1604
Fax: (613) 952-2844
Electronic mail address:

Additionals informations:

2.6 Scott Polar Research Institute Library

Name of data bank: SPRIL

Type of data bank: Bibliographical

Content summary:

SPRIL contains more than 18 000 references to documents (books and periodicals). Coverage encompasses scientific, political and social literature on the world's polar regions since 1985.

Environmental issues: Native way of life, habitat, marine environment, water management, contamination and cumulative impact.

Update frequency: Bimonthly.

Computer system: Q.L. System Inc.

Producer:
Scott Polar Research Institute Library
Lenfield Road
Cambridge, England
GB2 1ER

Resource person: Unspecified.

Telephone: 0223 336540
Fax:
Electronic mail address:

Additionals informations:

3. ACCESS SYSTEMS

3. ACCESS SYSTEMS

3.1 Telematic systems

Telematic networks are information transmission networks, i.e. communication systems that make it possible to access various data banks. There are a number of these networks covering almost the entire globe. Two telematic networks are described below.

- DATAPAC and INET

Users can communicate with a server via different telecommunication networks such as DATAPAC or INET. Communication with these services is established with a terminal or personal computer that can transmit data in full-duplex mode, in ASCII coding, at a speed of 30, 120 or 240 characters per second. This transmission speed varies according to the telecommunication network used.

The computer centre of your institution can provide you with an access code to the DATAPAC network.

- NETNORTH and BITNET

The NETNORTH network serves as the entry point for a number of systems for corresponding with universities or institutions involved in research in Canada, the United States and Europe. From your personal computer you transmit your text to your correspondent's address through the ext.: electronic mail.

This network was formed to link Canadian universities and to provide them with a electronic mail system connected with the similar network BITNET (USA). The system fosters information exchange between people with similar interests in all areas related to the concerns of the network's member institutions.

Such a network makes it possible to exchange information quickly and efficiently and eliminates the need to transfer data via a temporary storage medium.

More than 60 Canadian institutions are members of NETNORTH, representing a total of 200 addresses, four of which are at the University of Québec.

The computer centre in your institution can provide you with an access code for the NETNORTH electronic mail network. If you cannot obtain this code and the support you need, send your request to INFOPUQ (see address below).

3.2 Telereference systems

Telereference systems are stations linked together on communication networks and can be accessed with the proper authorization. Within these systems, programs allow users to manipulate the desired information. We have listed all the telereference systems mentioned in the directory that are used to consult bibliographical data banks.

INFOPUQ
2875, boul. Laurier
Suite 360
Sainte-Foy, Québec
G1V 2M3

Line Cormier
Telephone: (418) 657-3551

CAN\OLE
National Research Council Canada
Canada Institute for Scientific and Technical Information
Ottawa, Ontario
K1A 0S2

Telephone: (613) 952-8244
Electronic mail address: (Envoy 100), CISTI.CLIENT.SERV

DOMYNO
University of Québec at Chicoutimi
Computer Centre
500, boul. de l'Université
Chicoutimi, Québec
G7H 2B1

Patric Brard
Telephone: (418) 545-5011, ext.: 2358

DIALOG
Micromedia Ltd.
158 Pearl St.
Toronto, Ontario
M5H 1L3

Telephone: (416) 593-5211
(800) 387-2689

ORBIT
Server, ORBIT Search Service
8000 Westpark Dr.
McLean, VA 22102

James P. Terragno
Telephone: (703) 442-0900

Q.L.
Q.L. System Inc.
901 St. Andrev's Tower
275 Spark St.
Ottava, Ontario
K1R 7X9

Telephone: (613) 233-3499
Electronic mail address: (Envoy 100), 43964.UCDASVM1M
Network: BitNet

SSCL
The University of Western Ontario
Faculty of Social Science
Social Science Computing Library
London, Ontario
N6A 5C2

Telephone: (519) 661-2152
Fax: (519) 661-3868
Electronic mail address: REGISTRE@UWOVAX.BITNET

3.3 Digital discs and bibliographicals data banks

A few bibliographical data banks available on digital disc were mentioned in the preceding sections (WAVES, BOREAL, REGISTRER, etc.). However, it should be noted that there is a digital disc that contains several bibliographical data banks specializing in Northern regions.

Arctic and Antarctic Region

The National Information Services Corporation (NISC) is one of the companies specializing in the inventory of scientific document references. It puts out a CD-ROM digital disc in text mode that combines several reference data banks for documents specializing in circumpolar regions. The ARCTIC AND ANTARCTIC REGION disc contains the information of all the circumpolar data banks in section 2. Topics covered include: biology, fishing, wildlife, snow, ice, permafrost, limnology, geography, energy, pedology, environment and ecology, geophysics and geology, pollution and waste, water resources, medicine, cartography, botany and meteorology.

NISC combines the bibliographical data banks ASTIS, BOREAL, COLD, SPRIL and YUKON, which were described in section 2.

The cost of the CD-ROM is $ 795.00 per year, and includes quarterly update copies.

Marketed by:

National Information Services Corporation (NISC)
Wyman Towers
Suite 6
3100 Saint Paul St.
Baltimore, Maryland
21218, U.S.A.

Fred Durr
Telephone: (301) 243-0797
Fax: (301) 243-0982

4. INFORMATION SUMMARY TABLES

4. INFORMATION SUMMARY TABLES

4.1 CD-ROM digital discs

	DIGITAL DISCS			
DATA BANKS	CNRH	NISC	OPTIM	SSCL
ASTIS		X		
BOREAL		X		
C-CORE		X		
COLD	X			
REGISTRE				X
SPRIL		X		
WAVES		X	X	

4.2 Telereference systems and reference data banks

DATA BANKS	TELEREFERENCE SYSTEMS				
	BADADUQ	CAN\OLE	DOMYNO	ORBIT	QL
AQUAREF		X			
ASTIS					X
BADADUQ	X				
BOREAL		X			
CANREG		X			
COLD				X	
DOBIS		X			
DOMYNO			X		
ELIAS		X			
ENVIRODOC		X			
SPRIL					X
WATDOC		X			
YUKON					X

4.3 Documentation Centres on Northern Québec

SYSTEMS	DOCUMENTATION CENTRES				
	ENV. CAN.	ENV. QUE.	HYDRO QUE.	MAKIVIK CORP.	LAVAL UNIV.
DOBIS	X				
ELIAS	X				
MAKIVIK				X	
RIDAQ			X		
LANDS AND FORESTS		X			
LIBRARY					X

BIBLIOGRAPHY

BIBLIOGRAPHY

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Allen Robert, S. et Mary A.T. Tobin. Les Études autochtones au Canada; guide de recherche. Ministère des Affaires indiennes et du Nord Canadien, Direction de la recherche, Orientations générales, Ottawa, 3^e édition, février 1989, 203 p.

Environnement Canada. Environmental Database for State of the Environment Reporting. Atmospheric Environment Service, Canadian Park Service, Corporate Service Group, Environment Canada, Regional Offices. Report No. 16, April 1990, 161 p.

Ministère des Communications du Québec. Profil des banques de données au Gouvernement du Québec; analyse et inventaire. Version préliminaire, septembre 1989, 130 p.

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Identification:

* name of the department, native group, University, etc.

Name of the Organization:

* Branch, Service, Research Centre, etc.

Name of data bank:

* name.

Type of data bank:

* numerical;
* factual;
* bibliographical;
* others.

Content summary:

* brief description;
* subject and use;
* parameters measured;
* region of interest: one or more regions in Québec;
* collection method.

Environmental issues:

* Native way of life, fish habitat, marine environment, conservation of wildlife and wildlife habitat, management of Northern waters, conservation of the lac à l'Eau Claire Basin, mercury contamination of the environment and the food chain, world heritage and cumulative impact.

* specify your concerns as well

Update frequency:

* annual;
* quaterly, etc.

Computer system:

* access;
* telereference;
* restrictions and conditions;
* assistance available to users.

Producer:

* identification;
* complete address.

Resource person:

* name;
* complete address.

Telephone:

Fax:

Electronic mail address:

Additionals informations:

RETURN TO:

Environment Canada
Conservation and Protection, Québec Region
Environmental Assessment and
Northern Québec Affairs Branch
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